Application No. 10/803,703 Amendment Dated 4/5/2006 Reply to Office Action of 01/12/2006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A cotton bale handling method comprising: supporting the bale of cotton in a bale configuration using protective wrap extending around the bale:

transporting a cotton bale having a with the protective wrap from a harvest location to a cotton gin;

inserting an upper elongated wrap engaging structure into the bale;
engaging a lower portion of the protective wrap with a lower wrap engaging
structure;

tensioning a lower portion of the protective wrap with the lower wrap engaging structure;

positioning the cotton bale adjacent a receiver, the step of positioning including moving the tensioned lower portion of the protective wrap bale in a conveying direction against a severing device to facilitate removal of the cotton and draping of the protective wrap over the upper elongated wrap engaging structure;

separating the protective wrap from the cotton while the cotton bale is positioned adjacent the receiver; and

transferring cotton from the bale away from the wrap into the receiver for processing by the cotton gin.

Claim 2 (currently amended): The method as set forth in claim 1 wherein the step of separating tensioning includes severing the protective wrap rotating the lower wrap engaging structure.

Claim 3 (currently amended): The method as set forth in claim 2 wherein the step of severing includes supporting <u>a</u> knife structure adjacent the receiver, <u>the step of tensioning includes</u> tensioning the wrap adjacent the knife structure, and engaging the tensioned wrap and the knife structure <u>to form a single slit in a direction</u> corresponding to the conveying direction of motion.

Claim 4 (original): The method as set forth in claim 2 wherein the step of severing comprises supporting a knife adjacent an end of the receiver and moving the wrapped bale over the knife and towards a position over the receptacle so that the cotton falls from the severed wrap into the receiver.

Claim 5 (original): The method as set forth in claim 1 further comprising the step of capturing the protective wrap and preventing the protective wrap from being deposited in the receiver.

Claim 6 (currently amended): The method as set forth in claim 5 wherein the step of capturing comprises including positioning the upper wrap engaging portion under the protective wrap a distance approximately equal to a length of the bale a wrap support in the wrapped bale prior to the step of severing.

Claim 7 (original): The method as set forth in claim 5 wherein the step of capturing comprises capturing the protective wrap using differential air pressure.

Claim 8 (original): The method as set forth in claim 5 further comprising transporting the protective wrap away from the receiver through an air duct.

Claim 9 (currently amended): The method as set forth in claim 1 including the step of positioning the wrapped bale on a conveyor to move the bale along a path towards the receiver, the step of separating including supporting <u>a</u> wrap removal structure adjacent the conveyor.

Claim 10 (currently amended): The method as set forth in claim 9 wherein the step of supporting the wrap removal structure comprises supporting cutting structure at a location in the path to sever the protective wrap as the bale moves adjacent the receiver.

Claim 11 (currently amended): <u>A cotton</u> Cotton handling structure comprising:

a <u>flexible</u> protective wrap <u>containing the cotton and</u> defining a <u>shaped</u> cotton bale:

conveying structure for positioning the cotton bale relative to a cotton gin receiver with the protective wrap maintaining the cotton generally in a shaped bale;

separating structure located adjacent the receiver for <u>severing a lowermost</u> portion only the protective wrap for egress of the cotton from the lowermost portion and for collapsing the shaped bale;

the separating structure including a wrap engaging member for removing the

Application No. 10/803,703 Amendment Dated 4/5/2006 Reply to Office Action of 01/12/2006

<u>collapsed</u> protective wrap from the cotton bale positioned relative to the receiver; and <u>wherein the</u> wrap engaging structure <u>is</u> located adjacent the conveying structure <u>for</u> preventing removed wrap from being deposited in the receiver.

Claim 12 (currently amended): The cotton handling structure as set forth in claim 11 wherein the separating structure includes a wrap cutter engaging the protective wrap <u>and providing a single slit only in the protective wrap</u>.

Claim 13 (original): The cotton handling structure as set forth in claim 12 wherein wrap cutter includes a knife supported adjacent the receiver, the conveying structure moving the cotton bale relative to the knife to sever the wrap.

Claim 14 (currently amended): The cotton handling structure as set forth in claim 12 wherein the receiver includes an inlet, the wrap cutter is located adjacent inlet, tensioning structure for tensioning a lower portion of the wrap, and wherein the conveying structure moves the tensioned portion of the wrap in a first direction against the knife and towards the inlet to provide the single slit parallel to the first direction.

Claim 15 (original): The cotton handling structure as set forth in claim 11 wherein the wrap engaging structure comprises a wrap support inserted into the wrapped bale.

Claim 16 (original): The cotton handling structure as set forth in claim 15 wherein conveying structure includes a bale handler and the wrap support comprises an elongate member connected to the bale handler.

Claim 17 (original): The cotton handling structure as set forth in claim 11 wherein wrap engaging structure includes an air duct.

Claim 18 (original): The cotton handling structure as set forth in claim 17 further comprising a wrap processor connected to the air duct and receiving the removed wrap from the air duct.

Claim 19 (original): The cotton handling structure as set forth in claim 11 wherein the conveying structure includes a conveyor for moving the bale along a path towards the receiver, and the wrap engaging structure includes a knife located in the path and severing the wrap as the bale moves relative to the receiver.

20. The cotton handling structure as set forth in claim 11 wherein the conveying structure includes an adjustable bale support having opposed support members movable relative to the bale to tension the wrap engaging structure.

Claim 21 (currently amended): <u>A cotton</u> Cotton handling structure comprising:

a protective wrap defining a deformable wrapped cotton bale;

conveying structure for positioning moving the wrapped cotton bale in a first direction relative to a cotton gin receiver, the conveying structure including bale supports, the bale supports spreadable to tension an area of the protective wrap;

separating structure located adjacent the receiver for removing the protective wrap from the cotton bale positioned relative to the receiver, the separating structure including a cutter providing a slit in the tensioned area of the protective wrap in a direction generally parallel to the first direction; and

wrap removal structure preventing removed wrap from being deposited in the receiver.

Claim 22 (currently amended): The cotton handling structure as set forth in claim 21 wherein the conveying structure comprises bale supports comprise a bale handler with spreadable supports forks, the supports movable from a narrowed bale support position for supporting the bale to a widened cotton release position for facilitating release of the cotton to the receiver.

Claim 23 (currently amended): The cotton handling structure as set forth in claim 22 wherein the supports forks include claw members to engage the protective wrap are movable to tension the bale wrap, the separating structure including a cutter for severing the tensioned bale wrap.

Claim 24 (currently amended): The cotton handling structure as set forth in claim 21 wherein the conveying structure comprises a conveyor for receiving the cotton bale and moving the cotton bale along a path <u>in the first direction</u> towards the receiver, and wherein the separating structure includes a cutter located in the path for severing a portion of the protective wrap and facilitating release of cotton into the receiver.

Claim 25 (original): The cotton handling structure as set forth in claim 21 wherein the wrap removal structure comprises a source of vacuum capturing a portion of the wrap.

Claim 26 (original): The cotton handling structure as set forth in claim 22 wherein the wrap removal structure comprises means for engaging the wrap located

Application No. 10/803,703 Amendment Dated 4/5/2006 Reply to Office Action of 01/12/2006

on the bale handler.

Claim 27 (original): The cotton handling structure as set forth in claim 26 wherein the means for engaging the wrap comprises an elongated member located above the spreadable supports.

Claim 28 (currently amended): The cotton handling structure as set forth in claim 26 wherein the means for engaging the wrap comprises retractable wrap engaging members located adacent the spreadable supports forks.